

REMARKS

The Office Action mailed on April 29, 2010, has been received and its contents carefully considered. Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the following remarks. Upon entry of the present Reply, Claims 68, 69, 71 and 73-77 are pending in the present application. Claims 68, 69, 71 and 73-77 stand rejected. Claim 68 has been amended by way of the present response. Applicant submits that upon entry of the present Reply, Claims 68, 69, 71 and 73-77 are in condition for allowance. Moreover, Applicant submits that no new matter has been introduced by the foregoing amendments.

Examiner Interview

Applicant thanks the Examiner for the interview opportunity regarding the present application on March 2, 2010. As stated in the interview and interview summary, an agreement was reached regarding the amendments contained in the present response. Specifically, an agreement was reached that the proposed amendments herein would result in a withdrawal of the 35 U.S.C. 112, first paragraph rejections.

Rejections under 35 U.S.C. §112

Claims 68, 69, 71, and 73-77 stand rejected under 35 U.S.C. 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected to make and/or use the invention.

As noted above, Applicant has amended Claim 68 in accord with the agreement reached with the Examiner during the interview on March 2, 2010. Applicant now

believes that this rejection is now moot, however for purposes of this formal response, the arguments are reiterated below.

Specifically, the Examiner alleges that the, (e) updating information . . . , and (g) outputting the adjusted second flight plan steps of independent Claim 68 are not supported by the specification.

Applicant respectfully traverses these rejections for at least the following reasons. Claims 68, 69, 71, and 73-77 are fully supported by Applicant's specification.

Step (e), the Examiner agreed that the amended language "acquiring information . . . ," is at least supported by paragraphs 0040-0041, including "acquires information about crew scheduling and other limitations . . . ," (paragraph 0040); and "the weather information from Input 504 given to Pilot 500 is adjusted . . . ," (paragraph 0041); and "flight operations plan from Input 502 is adjusted accordingly to the weather . . . the crew limits . . . the maintenance . . . the load . . . and the passengers." (paragraph 0041, emphasis added). Each of these passages at least provides support for step (e) of "acquiring information . . . ," as disclosed in independent Claim 68.

Second, step (g) "outputting the adjusted second flight plan" is at least supported by paragraphs 0036-0038, including "Process information is presented as **factual output** . . . , (paragraph 0036, emphasis added); and "**Output solutions can include flight planning, en route decision making** moderated by weather and operating factors . . . , (paragraph 0037, emphasis added); and "**Output can be presented directly or indirectly** . . . , (paragraph 0040, emphasis added). Each of these passages at least provides support for step (g) "outputting the adjusted second flight plan" as disclosed in

independent Claim 68. In addition the Applicant has amended “aircraft control system” to “aircraft system” as suggested by the Examiner to overcome this rejection.

Accordingly, Applicant respectfully requests that the §112 rejections of Claims 68, 69, 71, and 73-77 be withdrawn.

Rejections under 35 U.S.C. §103

Claims 68, 69, 71, and 73-77 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U. S. Patent No. 4,642,775 to Cline et al. (hereinafter referred to as “Cline”).

Applicant respectfully traverses these rejections for at least the following reasons.

Independent Claim 68 is the sole independent claim presently under consideration. Cline, alone or in combination, does not teach or suggest every element recited in independent Claim 68, as amended.

The rejection of Claims 68, 69, 71 and 73-77 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cline is respectfully traversed.

Claim 68 recites:

A method of providing to and for use by an aircraft aviation professional a lightweight and easily manipulated electronic flight bag, said method comprising the steps of: (a) providing a transportable laptop computer to be carried by the aviation professional for use within at least one of an aircraft and an airport, in a carry bag; (b) programming the transportable laptop computer with linear and non-linear algorithms and operating programs to at least: process flight information, manipulate flight related data in a non-linear algorithm thereby aiding in flight decision-making

processes resulting in solutions to flight related mathematical computations and runway selections and aircraft operating parameters and procedures, calculate pilot fatigue limits and scheduling issues and fuel computations, and provide data displays to the aviation professional; (c) receiving information for a first flight plan from a flight operations, wherein the information for the first flight plan includes a departure runway information, destination information, alternate airports information, and fuel time information; (d) inputting aircraft and flight related data into the transportable laptop computer using an input device, wherein the aircraft and flight related data includes weather information for the first flight plan, aircraft crew scheduling information, aircraft maintenance information, aircraft load weight and balance information, and aircraft manifest information; (e) acquiring information that includes the weather information, the aircraft crew scheduling information, the aircraft maintenance information, the aircraft load weight and balance information and the aircraft manifest information on an up to the minute basis using the transportable laptop computer; (f) calculating using the transportable laptop computer while en route an adjusted second flight plan based on the up to the minute information, wherein the adjusted second flight plan is substantially different than the first flight plan; and (g) outputting the adjusted second flight plan while en route to the aviation professional using at least one of an interactive headgear worn by the aviation professional, a translucent display coupled to the transportable laptop computer and an aircraft system.

Cline does not describe or suggest every element recited in Claim 68. Rather, in contrast to the present invention, Cline describes a flight planning system that utilizes a portable computer (40) that includes a modem (51) that may be connected in communication to a **ground-based flight data center (30)**. The computer (40) also includes input devices, such as a keyboard (44), and output devices such as an LCD (42) and a disk drive (52). The ground-based data center (30) generates a flight plan, which is transmitted over a telephone line (48) to the computer (40) and loaded onto a disk (54) by

a pilot of an aircraft (10). **The disk (54) may then be physically carried by the pilot to the aircraft (10) and inserted into the on-board data management unit (20), which then makes the flight plan available to a flight management computer (14). As a result, the flight plan does not need to be manually entered into an onboard navigation system.**

The pilot may enter, or input, information related to a flight plan into the computer (40). As stated in Col. 6, lines 59-68 and Col. 7, lines 1-10, such information includes:

(1) aircraft registration number; (2) type of aircraft; (3) basic operating weight; (4) taxi fuel weight; (5) reserve fuel weight; (6) preferred mach/TAS; (7) direct operating cost; (8) fuel price per gallon; (9) maximum allowable fuel; (10) departure airport; (11) departure time; (12) destination airport; (13) route preference; (14) payload weight; (15) fuel on board; (16) performance bias; (17) weather requests; and (18) message entry.

Next, the pilot connects the computer (40) to the ground-based data center (30) using the **telephone lines (48)** and the modem (51). Notably, the flight plan described in Cline **is computed at the ground-based data center (30)**. Most notably, once the pilot receives, reviews and selects one of the flight plans computed by the ground-based data center (30), the flight plan is transferred onto the disk (54), the computer (40) is shutdown by the pilot and packed away, and then the pilot boards the aircraft (10). Once on board the aircraft (10), the pilot uploads the flight plan from the disk (54) to the on-board data management unit (20) using an on board data transfer unit (18). **As a result, the computer (40) is not used on the aircraft (10) en route.** As stated in Col. 8, lines 14 – 20:

Once the pilot has finished reviewing the flight plan data and weather that is displayed on the display unit (42), the disk (54) is ejected from the disk

drive (52) and transferred to the data transfer unit (18) in the cockpit by the pilot. **The portable computer (40) can then be stored in any convenient location such as the aircraft baggage compartment.**

Notably, Cline is silent regarding “acquiring information that includes the weather information, the aircraft crew scheduling information, the aircraft maintenance information, the aircraft load weight and balance information and the aircraft manifest information **on an up to the minute basis using the transportable laptop computer,**” as recited in Claim 68. Moreover, Cline is silent regarding “calculating using the transportable laptop computer **while en route** an adjusted second flight plan **based on the up to the minute information**, wherein the adjusted second flight plan is substantially different than the first flight plan,” as recited in Claim 68. Further, Cline is silent regarding “**outputting the adjusted second flight plan while en route** to the aviation professional using at least one of an **interactive headgear worn by the aviation professional, a translucent display coupled to the transportable laptop computer and an aircraft system,**” as recited in Claim 68. As a result, Cline does not describe or suggest every element recited in Claim 68.

To the contrary, the “portable computer” in Cline is not used as an in-flight component of any flight system, but rather strictly on the ground. Further, as stated in Cline Col 8, lines 1-13:

“Once the computer **has been disconnected** from the data center, the pilot **can review** on the display various factors relating to the generated flight plan. The data available **for review** includes: the pilot inputs, route description, flight levels, aircraft weights, fuel parameters. A leg by leg display of the flight plan is also provided that includes for each leg: flight level, distance, estimated time enroute (ETE), magnetic course, predicted fuel burn, predicted fuel flow, predicted ground speed, predicted true airspeed (TAS), forecast wind, forecast outside air temperature, predicted

remaining fuel, predicted remaining flight distance and predicted remaining flight time.” (emphasis added).

Therefore, the text items displayed can only be **reviewed** by the pilot, **not manipulated, integrated, or revised**. Further, the review function in Cline is only done after the computer is **disconnected** from the data center. To the contrary, the present invention is not limited to a set of pre-flight data inputs, but rather can integrate additional information in-flight, and allows for manipulation of data, rather than simple review. As a result, Cline does not describe or suggest every element recited in Claim 68.

For at least the reasons set forth above, Applicant respectfully submits that independent Claim 68 is patentable over Cline. Since dependent Claims 69, 71 and 73-77 depend directly from independent Claim 68, Applicant respectfully submits that Claims 69, 71 and 73-77 likewise are patentable over Cline.

Accordingly, Applicant respectfully requests that the 103 rejection of Claims 68, 69, 71 and 73-77 be withdrawn.

CONCLUSION

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds of rejection are believed to have been overcome. The application, as amended, is believed to be in condition of allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,
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